## ABSTRACT

The present invention provides a novel, membrane-type matrix metalloproteinase polypeptide [MT4-MMP(2)] that has, different from the hitherto reported MT4-MMP, physiological activity; DNAs encoding the metalloproteinase polypeptide; a method of producing the metalloproteinase polypeptide; and a method of screening for inhibitors or activators of the metalloproteinase polypeptide using the metalloproteinase polypeptide and the DNAs.

The present invention also provides novel, human and mouse membrane-type matrix metalloproteinase polypeptides (MT5-MMPs) having physiological activity; DNAs encoding the metalloproteinase polypeptides; a method of producing the metalloproteinase polypeptides; and a method of screening for inhibitors or activators of the metalloproteinase polypeptides using the metalloproteinase polypeptides and the DNAs.